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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/955,905	09/19/2001	James E. Fox	RSW920000190US1	9906

7590 07/26/2005

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EXAMINER

PHAN, MAN U

ART UNIT PAPER NUMBER

2665

DATE MAILED: 07/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/955,905

Applicant(s)

FOX ET AL.

Examiner

Man Phan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 September 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4-16, 18-21, 23, 25- is/are rejected.
- 7) ☒ Claim(s) 3, 17, 22 and 24 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 9/19/01.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. The application of Fox et al. for a "Selective routing of multi-recipient communications" filed 09/19/2001 has been examined. Claims-1-25 are pending in the application.

Claim Objections

2. Claims 1, 21 and 23 are objected to because of the following informalities: The claims contain the phrase "capable of". It has been held that the recitation that an element is "capable of" perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. In re Hutchison, 69 USPQ 138. Appropriate correction is required.

Claim Rejections - 35 USC ' 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 21, 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oguchi (US2002/0023152) in view of Brown (US#6,754,211).

With respect to claims 21 and 23, Oguchi (US2002/0023152) and Brown (US#6,754,211) disclose a novel system and method for selective routing of a multi-recipient communication from an origin domain to a destination domain within a communication network, according to the essential features of the claims. Oguchi (US2002/0023152) discloses a communication data relay system for relaying between two or more domains each configured by one or more networks utilizing microprocessor and memory for executing the control program stored in memory, as shown in Fig. 2 ([0050] and [0088]-[0091]). Oguchi further teaches in Fig. 3 a functional block diagram illustrated the router 3, in which the CPU 14 executes a relay control program 31 and a routing control program 30. The relay control program 31 includes a packet receiving module 28, a route search module 25, an inter-domain communication judging module 26, an address translation module 27, and a packet forwarding module 29. The CPU 14 executing this relay control program corresponds to a relay control unit. The CPU 14 thereby

exchanges routing information with respect to other communication devices and other routers (*routing from the origin domain to the destination domain of multi-recipient communications*) (See also Figs. 13-17; [0093] -[0095] and [0189]-[0223]).

However, Oguchi does not disclose expressly the step of modifying the datagram to form a reconstructed datagram, and initiating multi-recipient delivery of the reconstructed datagram in the destination domain. In the same field of endeavor, Brown (US#6,754,211) discloses a IP multicast forwarding system (Fig. 1), in which the egress port forwarding logic includes a modification entry for each member of the IP Multicast group associated with the IP Multicast data packet. Upon receiving a copy of an IP Multicast data packet from memory, the egress port forwarding logic modifies the copy of the IP Multicast data packet dependent on a modification entry associated with the egress port to which the IP Multicast data packet is to be forwarded (See Figs. 5 & 8; Col. 1, lines 42 plus, Col. 3, lines 27 plus, & Col. 10, lines 1 plus). It's noted that, their principle of forwarding datagrams from one domain to another is based on the networking and routing information that is present at the header of the network layer part of the datagram. The network layer is defined by international and industry standards and contains address, network, routing and control characters according to specific network layer protocol, such as (but not limited to) IP, DECNET Network protocol, IPX, XNS. Routers forward and route to other domains only those datagrams that are requesting to be transmitted to other domains. The request is inserted within the network layer header of the datagram. While forwarding and routing datagrams from one domain to another, the router might change or modify headers of the datagram within the MAC layer and network layer.

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Regarding claims 1, 2, 4-11 and 12-16, 18-20, 25, they are method claims corresponding to the apparatus claims 21, 23 above. Therefore, claims 1, 2, 4-11 and 12-16, 18-20, 25 are analyzed and rejected as previously discussed with respect to claims 21, 23.

One skilled in the art would have recognized the need for selective routing of multi-recipient communications between domains, and would have applied Brown's teaching of the modifying UDP in multicast routing into Oguchi's novel use of data relay system for relaying between different domain networks. Therefore, It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to apply Brown's method and apparatus for wire speed IP multicast forwarding into Oguchi's communication data relay system with the motivation being to provide a method and system for selective routing of a multi-recipient communication from an origin domain to a destination domain of a communication network.

Allowable Subject Matter

6. Claims 3, 17 and 22, 24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is an examiner's statement of reasons for the indication of allowable subject matter: The closest prior art of record fails to disclose or suggest wherein wrapping the datagram with a wrapper suitable for routing from the origin domain to the destination domain; the steps of removing a wrapper applied to the datagram in the origin domain, and modifying a header of the datagram suitable for routing in the origin domain to create a header

suitable for routing in the destination domain; wherein fourth instructions stored in the memory and executable by the microprocessor for retrieving information indicating parameters for multi-recipient delivery in the destination domain, as specifically recited in the claims.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The Doring et al. (US#5,361,256) is cited to show the inter-domain multicast routing.

The Imai et al. (US#6,862,279) is cited to show the multicast distribution system of packets

The Vig (US#6,115,385) is cited to show the method and system for subnetting in a switched IP network.

The Kshirsagar et al. (US#6,483,853) is cited to show the communications system for transmission of datagram packets over connection-oriented networks

The Novaes (US#6,732,189) is cited to show the method and apparatus for fault tolerant tunneling of multicast datagrams.

The Branth et al. (US#6,822,958) is cited to show the implementation of multicast in an ATM switch.

The Hurren et al. (US#6,788,681) is cited to show the virtual private networks and methods for their operation.

The Hinderks et al. (US#2002/0067730) is cited to show the method and apparatus for IP multicast content distribution system having national and regional demographically targeted

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advertisement insertion.

The Mahalingaiah et al. (US#6,788,701) is cited to show the communication network having modular switches that enhance data throughput.

The Balachandran et al. (US#6,115,394) is cited to show the method, apparatus and computer program products for packet transport over wireless communication links.

The Faineant et al. (US#2002/0089943) is cited to show the addressing method for use in an access network or a satellite infrastructure network that can support data transfer in non-connected mode.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Phan whose telephone number is (571) 272-3149. The examiner can normally be reached on Mon - Fri from 6:00 to 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu, can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2600.

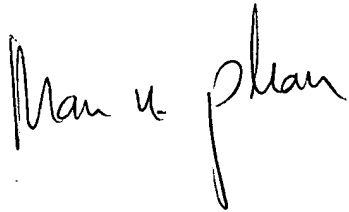
9. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about

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the PAIR system, see <http://pair-direct.uspto.gov>. Should you have any questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at toll free 1-866-217-9197.

Mphan

07/22/2005.

A handwritten signature in cursive script that reads "Man U. Phan".

**MAN U. PHAN
PRIMARY EXAMINER**